

The Revised Claims

As noted in the Official Communication of June 23, 2009, the Board of Patent Appeals and Interferences affirmed the rejection of Claims 1, 2, 6-9, 11-14, 16 and 20-25, but reversed all rejections against dependent Claims 3-5, 10, 15 and 17-19. In accordance with the Examiner's instructions, Applicants have presented with this response Claims 3-5, 10, 15, and 17-19 in an amended form wherein a) the claims have been modified so as to incorporate the limitations of any base claim and intervening claims, or b) the dependency has been altered so that the claim is now dependent upon properly amended base claim. The presentation of such puts this case in accordance with the decision of the Board and in accordance for allowance.

A complete listing of Claims is presented below:

1. (canceled) In a video on demand system for supplying video data to a plurality of subscriber receivers via a program delivery network, the improvement comprising:

- a. A data base storage system containing a plurality of video ' on demand programs;
- b. A temporary video storage memory;
- c. A transaction server directly coupled to said data base storage system, said temporary video storage memory, and said plurality of subscriber receivers whereby each of said plurality of subscriber receivers requests a different video on demand program from said transaction server and said transaction server spools said different video on demand programs from said data base storage to said temporary video storage memory; and
- d. A plurality of video servers directly coupled to said transaction server and said temporary video storage memory and responsively coupled to said plurality of subscriber receivers via said program delivery network wherein said plurality of video servers are assigned by said transaction server to stream said spooled different video on demand programs from said temporary video storage memory to said plurality of subscriber receivers via said program delivery network.

2. (canceled) The video on demand server of claim 1 wherein said transaction server further comprises a transaction gateway software module operating in a middleware environment and a video server frame and stream spooling program responsively coupled to said transaction gateway via said middleware environment and wherein each of said plurality of video servers further comprises an industry compatible personal computer.

3. (presently amended) In a video on demand system for supplying video data to a plurality of subscriber receivers via a program delivery network, the improvement comprising:

- a. A data base storage system containing a plurality of video ' on demand programs;

- b. A temporary video storage memory;
- c. A transaction server directly coupled to said data base storage system, said temporary video storage memory, and said plurality of subscriber receivers whereby each of said plurality of subscriber receivers requests a different video on demand program from said transaction server and said transaction server spools said different video on demand programs from said data base storage to said temporary video storage memory wherein said transaction server further comprises a transaction gateway software module operating in a middleware environment and a video server frame and stream spooling program responsively coupled to said transaction gateway via said middleware environment and wherein each of said plurality of video servers further comprises an industry compatible personal computer;
- d. A plurality of video servers directly coupled to said transaction server and said temporary video storage memory and responsively coupled to said plurality of subscriber receivers via said program delivery network wherein said plurality of video servers are assigned by said transaction server to stream said spooled different video on demand programs from said temporary video storage memory to said plurality of subscriber receivers via said program delivery network; and
- e. ~~The video on demand system of claim 2 further comprising a~~ A mainframe computer platform hosting said transaction server responsively coupled to said one of said plurality of video servers and said subscriber receiver.

4. (previously presented) The video on demand system of claim 3 wherein said mainframe computer platform further comprises a Unisys mainframe computer system.

5. (previously presented) The video on demand system of claim 4 wherein said transaction server spools said video on demand program in the MPEG-2 format.

6. (canceled) An apparatus comprising:

- a. A plurality of subscribing receivers each capable of providing a plurality of service requests;
- b. A data base storage system which stores a plurality of video programs;

- c. A temporary digital memory storage device;
- d. A transaction server directly coupled to said plurality of subscribing receivers, said temporary digital memory storage device, and said data base storage system capable of receiving said plurality of service requests, accessing said plurality of video programs corresponding to said plurality of service requests from said data base storage system, and spooling said plurality of video programs into said temporary digital memory device in response thereto; and
- e. A plurality of video servers directly coupled to said transaction server, said temporary digital memory storage device, and said plurality of subscribing receivers wherein said transaction server assigns one of said plurality of video servers to stream said spooled plurality of video programs from said temporary digital memory device to. said plurality of subscribing receivers.

7. (canceled) An apparatus according to claim 6 wherein said transaction server further comprises a subscriber account whereby each of said plurality of subscribing receivers is charged for corresponding ones of said plurality of service requests.

8. (canceled) An apparatus according to claim 7 wherein said transaction server further comprises a transaction gateway operating in a commercial middleware environment.

9. (canceled) An apparatus according to claim 7 wherein said plurality of spooled video programs further comprises MPEG-2.

10. (presently amended) An apparatus comprising:

- a. A plurality of subscribing receivers each capable of providing a plurality of service requests;
- b. A data base storage system which stores a plurality of video programs;
- c. A temporary digital memory storage device;
- d. A An apparatus according to claim 9 wherein said transaction server further comprises a Unisys computer system transaction server directly coupled to said plurality of subscribing receivers, said temporary digital memory storage

device, and said data base storage system capable of receiving said plurality of service requests, accessing said plurality of video programs corresponding to said plurality of service requests from said data base storage system, and spooling, in MPEG-2 format, said plurality of video programs into said temporary digital memory device in response thereto, wherein said transaction server further comprises a subscriber account whereby each of said plurality of subscribing receivers is charged for corresponding ones of said plurality of service requests; and

e. A plurality of video servers directly coupled to said transaction server, said temporary digital memory storage device, and said plurality of subscribing receivers wherein said transaction server assigns one of said plurality of video servers to stream said spooled plurality of video programs from said temporary digital memory device to said plurality of subscribing receivers.

11. (canceled) A video on demand system comprising:

- a. Storing means for storing a plurality of video programs;
- b. Plurality of generating means for generating a plurality of different requested video on demand signals;
- c. Identifying means directly coupled to said generating means and said storing means for identifying a number of said plurality of video programs stored within said storing means corresponding to said plurality of different requested video on demand signals;
- d. Temporarily storing means for temporarily storing said plurality of different requested video on demand signals;
- e. Spooling means directly coupled to said identifying means, said temporarily storing means, and said storing means for spooling said corresponding number of said plurality of video programs from said storing means into said temporarily storing means which said identifying means identifies; and
- e. A plurality of streaming means directly coupled to said spooling means, said temporarily storing means, and said receiving means for streaming said spooled number of said plurality of video programs corresponding to said plurality of different requested video on demand signals from said temporarily storing means to said plurality of generating means wherein said spooling means assigns one

or said plurality of streaming means to stream said spooled number of said plurality of video programs to said plurality of generating means.

12. (canceled) A video on demand system according to claim 11 wherein said plurality of generating means further comprises a subscriber box.

13. (canceled) A video on demand system according to claim 12 wherein said identifying means further comprises a transaction gateway.

14. (canceled) A video on demand system according to claim 13 wherein said identifying means further comprises processing means for processing subscriber transactions.

15. (presently amended) A video on demand system comprising:

- a. Storing means for storing a plurality of video programs;
- b. Plurality of subscriber boxes generating a plurality of different requested video on demand signals;
- c. A transaction gateway comprising according to claim 14 wherein said identifying means further comprises a Unisys mainframe computer system, directly coupled to said plurality of subscriber boxes and said storing means, adapted for identifying a number of said plurality of video programs stored within said storing means corresponding to said plurality of different requested video on demand signals and wherein said transaction gateway further comprises processing means for processing subscriber transactions;
- d. Temporarily storing means for temporarily storing said plurality of different requested video on demand signals;
- e. Spooling means directly coupled to said a transaction gateway, said temporarily storing means, and said storing means for spooling said corresponding number of said plurality of video programs from said storing means into said temporarily storing means which said a transaction gateway identifies; and
- f. A plurality of streaming means directly coupled to said spooling means, said temporarily storing means, and said receiving means for streaming said

spooled number of said plurality of video programs corresponding to said plurality of different requested video on demand signals from said temporarily storing means to said plurality of subscriber boxes wherein said spooling means assigns one or said plurality of streaming means to stream said spooled number of said plurality of video programs to said plurality of subscriber boxes.

16. (canceled) A method of providing video on demand services comprising:

- a. Storing a plurality of video programs in a video storage facility;
- b. Receiving a video on demand request from a subscriber at a transaction server;
- c. Determining a one of said plurality of video programs corresponding to said video on demand request by said transaction server;
- d. Spooling said one of said plurality of video programs corresponding to said video on demand request from said video storage facility into a temporary storage facility by said transaction server;
- e. Assigning one of a plurality of video servers responsively coupled to subscriber to stream said one of said plurality of video programs corresponding to said video on demand request to said subscriber by said transaction server; and
- f. Streaming said spooled video program from said temporary storage facility by said assigned video server to said subscriber.

17. (presently amended) A method ~~according to claim 16 further~~ providing video on demand services comprising:

- a. Storing a plurality of video programs in a video storage facility;
- b. Receiving a video on demand request from a subscriber at a transaction server;
- c. Determining a one of said plurality of video programs corresponding to said video on demand request by said transaction server;
- d. Spooling said one of said plurality of video programs corresponding to said video on demand request from said video storage facility into a temporary storage facility by said transaction server;

- e. Assigning one of a plurality of video servers responsively coupled to subscriber to stream said one of said plurality of video programs corresponding to said video on demand request to said subscriber by said transaction server;
- f. Streaming said spooled video program from said temporary storage facility by said assigned video server to said subscriber; and
- ag. Pausing said streaming in response to a pause signal from said subscriber to said transaction server.

18. (presently amended) A method according to claim ~~46~~ 17 further comprising:
a. ~~Reversing~~ reversing said streaming in response to a reverse signal from said subscriber to said transaction server.

19. (presently amended) A method according to claim ~~46~~ 17 further comprising:
a. ~~Fast~~ fast forwarding said streaming in response to a fast forward from said subscriber to said transaction server.

20. (canceled) A method according to claim 16 wherein said processing step further comprises:
a. Performing subscriber accounting to enable billing said subscriber for said video on demand request by said transaction server.

21. (canceled) An apparatus for delivering video on demand programs to a plurality of requesters comprising:
a. a software controlled transaction server directly coupled to said plurality of requesters which manages an interface between said apparatus and said plurality of requesters;
b. a storage facility directly coupled to said software controlled transaction server which contains a plurality of video programs;
c. a temporary memory directly coupled to said software controlled transaction server wherein said software controlled transaction server spools a requested one of said plurality of video programs requested by one of said plurality of requesters from said storage facility into said temporary memory;

d. a plurality of video servers directly coupled to said temporary memory and said software controlled transaction server from which said software controlled transaction server assigns a particular one of said plurality of video servers wherein said particular one of said plurality of video servers streams said requested one of said plurality of video programs from said temporary memory to said one of said plurality of requesters.

22. (canceled) An apparatus according to claim 21 further comprises a plurality of video program sources directly coupled to said software controlled transaction server which stores said plurality of video programs from said plurality of video program sources in said storage facility.

23. (canceled) An apparatus according to claim 22 further comprising a transmission network located intermediate said plurality of video servers and said plurality of requesters whereby said particular one of said plurality of video servers streams said requested one of said plurality of video servers to said one of said plurality of requesters.

24. (canceled) An apparatus according to claim 23 wherein said one of said plurality of requesters further comprises a subscriber box.

25. (canceled) An apparatus according to claim 24 further comprising a request generated by said one of said plurality of requesters transferred to said software controlled transaction server requesting the delivery of a pizza.